



17W

PATENT  
ATTORNEY DOCKET NO. 50304/112001

Certificate of Mailing: Date of Deposit: September 29, 2006

I hereby certify under 37 C.F.R. § 1.8(a) that this correspondence is being deposited with the United States Postal Service as **first class mail** with sufficient postage on the date indicated above and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Christine E. Fort

Printed name of person mailing correspondence

Signature of person mailing correspondence

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Jean-Marie SAINT-REMY et al. Confirmation No.: 9175  
Serial No.: 10/566,851 Art Unit: 1645  
Filed: February 1, 2006 Examiner: Not Yet Assigned  
Customer No.: 21559  
Title: VARIABLE ANTIBODIES

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

PETITION TO CORRECT FILING RECEIPT

Applicant requests that the enclosed filing receipt be corrected as follows.

**Applicant(s)**

In the Applicant(s) section, please make the following change:

Change the spelling of inventor name "Marc Jacquemin" to "Marc Jacquemin."

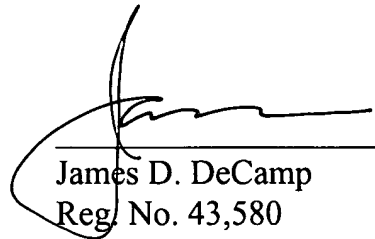
Enclosed are copies of the incorrect filing receipt and the national phase transmittal, the application data sheet, and the first page of International Publication No. WO 2005/016455 A2 as filed on February 1, 2006.

If there are any charges or any credits, please apply them to Deposit Account No.

03-2095.

Respectfully submitted,

Date: 29- Sep -2006

  
James D. DeCamp  
Reg. No. 43,580

Clark & Elbing LLP  
101 Federal Street  
Boston, MA 02110  
Telephone: 617-428-0200  
Facsimile: 617-428-7045



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/566,851	02/01/2006	1645	675	50304112001	14	24	2

**DE-DOCKETED**

CONFIRMATION NO. 9175

21559  
 CLARK & ELBING LLP  
 101 FEDERAL STREET  
 BOSTON, MA 02110

**FILING RECEIPT**

\*OC000000020540651\*

Date Mailed: 09/22/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

**Applicant(s)**

Jean-Marie Saint-Remy, Grez-Doiceau, BELGIUM;  
~~Marc Jacquemin~~, Sart-Bernard, BELGIUM;  
*Marc Jacquemin*

**Assignment For Published Patent Application**

D. COLLEN RESEARCH FOUNDATION VZW, Leuven, BELGIUM

**Power of Attorney:** The patent practitioners associated with Customer Number 21559.**Domestic Priority data as claimed by applicant**

This application is a 371 of PCT/BE04/00118 08/16/2004

**Foreign Applications**

UNITED KINGDOM 0319118.6 08/14/2003

UNITED KINGDOM 0319345.5 08/18/2003

**If Required, Foreign Filing License Granted:** 09/21/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/566,851**

**Projected Publication Date:** 12/28/2006**Non-Publication Request:** No**Early Publication Request:** No

**\*\* SMALL ENTITY \*\*****Title**

Variable antibodies

**Preliminary Class**

435

**PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

---

**LICENSE FOR FOREIGN FILING UNDER  
Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted

under 37 CFR 5.13 or 5.14.

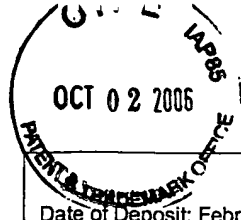
This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

#### **NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

OCT 02 2006



## Certificate of Mailing

Date of Deposit: February 1, 2006

Label Number: EV 768765350 US

I hereby certify under 37 C.F.R. § 1.10 that this correspondence is being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" with sufficient postage on the date indicated above and is addressed to Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Elvis DeLaCruz

Printed name of person mailing correspondence

Signature of person mailing correspondence

Substitute Form PTO 1390 U.S. Department of Commerce Patent and Trademark Office

Attorney Docket Number:

TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. § 371

50304/112001

U.S. Application Number:

Not Yet Assigned

INTERNATIONAL APPLICATION NUMBER

INTERNATIONAL FILING DATE

PRIORITY DATE CLAIMED

PCT/BE2004/000118

August 16, 2004

August 14, 2003

TITLE OF INVENTION:

VARIABLE ANTIBODIES

APPLICANTS FOR DO/EO/US:

Jean-Marie SAINT-REMY and Marc JACQUEMIN

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a FIRST submission of items concerning a filing under 35 U.S.C. § 371.
2. ☐ This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. § 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. § 371(f)).
4. ☒ The U.S. has been elected.
5. A copy of the International Application (35 U.S.C. § 371(c)(2)).
  - ☒ a. is transmitted herewith (required only if not transmitted by the International Bureau).
  - ☒ b. has been transmitted by the International Bureau.
  - ☐ c. Is not required, as the application was filed with the United States Receiving Office (RO/US).
6. An English language translation of the International Application into English (35 U.S.C. § 371(c)(2)).
  - ☐ a. is transmitted herewith.
  - ☐ b. has been previously submitted under 35 U.S.C. 154(d)(4).
7. Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. § 371(c)(3)).
  - ☐ a. are transmitted herewith (required only if not transmitted by the International Bureau).
  - ☐ b. have been transmitted by the International Bureau.
  - ☐ c. have not been made; however, the time limit for making such amendments has NOT expired.
  - ☒ d. have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. § 371(c)(3)).
9. ☒ An oath or declaration of the inventors (35 U.S.C. § 371(c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. § 371 (c)(5)).
11. ☒ An Information Disclosure Statement under 37 C.F.R. §§ 1.97 and 1.98.
12. ☐ An assignment for recording. A separate cover sheet in compliance with 37 C.F.R. §§ 3.28 and 3.31 is included.
13. ☒ A preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A power of attorney and/or change of address letter.
16. ☐ Request for Deferred Examination.
17. ☒ Application Data Sheet.
18. ☒ Other items or information: WO 2005/016455 A2 (122pp.); Form PCT/IB/311 (1p.); PCT Request (11pp.); Form PCT/IPEA/401 (4pp.) Sequence Listing (17pp.); Sequence Statement (2pp.); Sequence Diskette (1 disc)
19. ☒ The following fees are submitted:

Basic National Stage Fee: \$300				\$ 300.00	
<b>National Stage Search Fee</b> If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4): \$0  Search fee (37 C.F.R. § 1.445(a)(2)) has been paid on the international application to the USPTO as an International Search Authority: \$100  International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB: \$400  All other situations: \$500				\$ 500.00	
<b>National Stage Examination Fee</b> If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4): \$0  All other situations: \$200				\$ 200.00	
Surcharge of \$130 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 C.F.R. § 1.492(h)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	24 - 20 =	4	x \$50	\$ 200.00	
Independent claims	2 - 3 =	0	x \$200	\$ 0	
Multiple dependent claims (if applicable)			+ \$360	\$ 0	
Application Size Fee: Additional fee for specification and drawings in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
TOTAL SHEETS	EXTRA SHEETS	Number of each additional 50 sheets or fraction thereof (round up to a whole number)	RATE		
122-100=	22/50=	1	X\$250	\$ 250.00	
TOTAL OF ABOVE CALCULATIONS =				\$ 1,450.00	
Reduction of 1/2 for filing by small entity, if applicable. Applicant claims small entity status under 37 C.F.R. § 1.27.				\$ 725.00	
SUBTOTAL =				\$ 725.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 C.F.R. § 1.492(f)).				+	\$
TOTAL NATIONAL FEE =				\$ 725.00	
Fee for recording the enclosed assignment (37 C.F.R. 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 C.F.R. §§ 3.28, 3.31). \$40.00 per property.				+	\$
TOTAL FEES ENCLOSED =				\$ 725.00	
				Amount to be refunded	\$
				charged	\$
<input checked="" type="checkbox"/> a. Enclosed is a check for \$ 725.00 to cover the total fees. <input type="checkbox"/> b. Enclosed is a check for ["\$300/\$150"] to cover the basic national stage fee; no other fees are being paid at this time. <input type="checkbox"/> c. Please charge my Deposit Account No. 03-2095 in the amount of \$[""] to cover the above fees. <input checked="" type="checkbox"/> d. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Deposit Account No. 03-2095.					
NOTE: Where an appropriate time limit under 37 C.F.R. §§ 1.494 or 1.495 has not been met, a petition to revive (37 C.F.R. § 1.137(a) or (b)) must be filed and granted to restore the application to pending status.					

SEND ALL CORRESPONDENCE TO:

James D. DeCamp, Ph.D.  
Clark & Elbing LLP  
101 Federal Street  
Boston, MA 02110-2214

Telephone: 617-428-0200  
Facsimile: 617-428-7045  
Customer No.: 21559

  
\_\_\_\_\_  
Signature

James D. DeCamp, Ph.D.  
Reg. No. 43,580





## **Application Data Sheet**

### **Application Information**

Application number::

Filing Date:: February 1, 2006

Application Type:: Regular

Subject Matter:: Utility

Suggested Classification::

Suggested Group Art Unit::

CD-ROM or CD-R?:: Listing

Number of CD disks:: 1

Number of copies of CDs:: 1

Sequence submission?:: CD

Computer Readable Form (CRF)?:: Yes

Number of copies of CRF:: 1

Title:: VARIABLE ANTIBODIES

Attorney Docket Number:: 50304/112001

Request of Early Publication?:: No

Request of Non-Publication?:: No

Suggested Drawing Figure:: 8

Total Drawing Sheets:: 14

Small Entity?:: Yes

Petition Included?:: No

Petition Type::

Licensed US Govt. Agency::

Contract or Grant Numbers::

Secrecy Order in Parent Appl.?: No

### **Applicant Information**

Applicant Authority Type: Inventor

Primary Citizenship Country: Belgium

Status: Full Capacity

Given Name: Jean-Marie

Middle Name:

Family Name: SAINT-REMY

Name Suffix:

City of Residence: Grez-Doiceau

State or Province of Residence:

Country of Residence: Belgium

Street of mailing address: Rue du Lambais 79

City of mailing address: Grez-Doiceau

State or Province of mailing address:

Country of mailing address: Belgium

Postal or Zip Code of mailing address: B-1390

### **Correspondence Information**

Correspondence Customer Number: 21559

### **Representative Information**

Representative Customer Number: 21559

Applicant Authority Type: Inventor

Primary Citizenship Country:: Belgium  
Status:: Full Capacity  
Given Name:: Marc  
Middle Name::  
Family Name:: JACQUEMIN  
Name Suffix::  
City of Residence:: Sart-Bernard  
State or Province of Residence::  
Country of Residence:: Belgium  
Street of mailing address:: Rue Morimont 45  
City of mailing address:: Sart-Bernard  
State or Province of mailing address::  
Country of mailing address:: Belgium  
Postal or Zip Code of mailing address:: B-5330

**Correspondence Information**

Correspondence Customer Number:: 21559

**Representative Information**

Representative Customer Number:: 21559

**Domestic Priority Information**

Application::	Continuity Type::	Parent Application::	Parent Filing Date::
This Application	National stage of	PCT/BE2004/000118	August 16, 2004

**Foreign Priority Information**

Country::	Application Number::	Filing Date::	Priority Claimed::
-----------	----------------------	---------------	--------------------

GB	0319118.6	August 14, 2003	YES
GB	0319345.5	August 18, 2003	YES

**Assignee Information**

Assignee name::

Street of mailing address::

City of mailing address::

State of Province of mailing address::

Country of mailing address::

Postal or Zip Code of mailing address::

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
24 February 2005 (24.02.2005)

PCT

(10) International Publication Number  
**WO 2005/016455 A2**

(51) International Patent Classification<sup>7</sup>: **A61P 07/02**,  
A61K 39/395, C07K 16/36

(21) International Application Number:  
PCT/BE2004/000118

(22) International Filing Date: 16 August 2004 (16.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0319118.6 14 August 2003 (14.08.2003) GB  
0319345.5 18 August 2003 (18.08.2003) GB

(71) Applicant (for all designated States except US): **D. COLLEN RESEARCH FOUNDATION VZW** [BE/BE];  
Onderwijs & Navorsing, Campus Gasthuisberg, Herestraat  
49, B-3000 Leuven (BE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SAINT-REMY, Jean-Marie** [BE/BE]; Rue du Lambais 79, B-1390  
Grez-Doiceau (BE). **JACQUEMIN, Marc** [BE/BE]; Rue  
Morimont 45, B-5330 Sart-Bernard (BE).

(74) Agents: **BIRD, William, E. et al.**; Bird Goën & Co, Klein  
Dalenstraat 42 A, B-3020 Winksele (BE).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

**Declaration under Rule 4.17:**

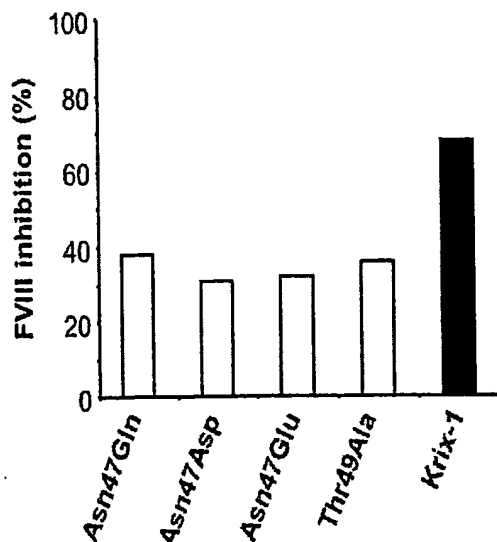
— of inventorship (Rule 4.17(iv)) for US only

**Published:**

— without international search report and to be republished  
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance  
Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: VARIABLE ANTIBODIES



(57) Abstract: The present invention discloses inhibitory anti-  
bodies against Factor VIII with modified glycosylation, either  
by enzymatic deglycosylation or by site directed mutagenesis.  
Said antibodies with modified glycosylation have equal affinity  
for FVIII but show different inhibiting properties. The use of  
one or a mixture of said antibodies allow modulation of the inhi-  
bition of factor VIII to levels between 40 and 95%. The present  
invention further disclosed pharmaceutical compositions com-  
prising inhibitory antibodies against Factor VIII with modified  
glycosylation, combinations of these antibodies and methods  
for treating haemostasis disorders using said antibodies and an-  
tibody mixtures.

WO 2005/016455 A2

BEST AVAILABLE COPY